

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today as not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NICK KALAGEROS, HOLLY GIANGRANDE, ROCH TOLINSKI,
CHARLIE HOPSON, STEVEN FOSTER,
LAURENT ARQUEVAUX, RAINER GRIMM
and CARMELO MONDELLO

Appeal No. 2005-2221
Application 09/592,751

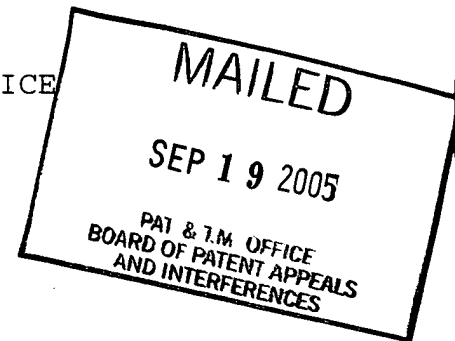
ON BRIEF

Before PAK, WARREN and OWENS, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 4, 10, 11, 14 through 16, 20 through 24 and 32 through 37. Claims 5 through 9, 12, 13, 17 through 19 and 25 through 31, the other claims pending in the above-identified application, stand withdrawn from



consideration by the examiner as being directed to a non-elected invention.

APPEALED SUBJECT MATTER

The subject matter on appeal is directed to a vehicle body panel which is designed to crumple in a predisposed manner. See the specification, page 1. Details of the appealed subject matter are recited in representative claims 1, 12, 14, and 20 which are reproduced below:

1. A vehicle body panel comprising:

a sheet of material; and

spaced reinforcement on said sheet of material such that said panel crumples in a predetermined manner.

12. A vehicle body panel comprising:

a polymeric material reinforced with spaced ribs on one side;
and

a color material attached to an opposed side of said polymeric material.

14. A vehicle body panel comprising:

a polymeric material reinforced with a spaced reinforcing material on one side; and

a colored material attached to an opposed side of said reinforced polymeric material wherein said colored material defines an exterior surface of a vehicle body panel and said polymeric material with said spaced reinforcing material is deformable in a predetermined manner in response to an impact force.

20. A vehicle body panel comprising:

a color layer forming an exterior surface of a vehicle body panel; and

a reinforcement layer attached to said colored layer and including a plurality of first sections having a first deformability and a plurality of second sections having a second deformability that is less than said first deformability wherein said first and second sections alternate in a predetermined pattern laterally across the body panel such that said colored and reinforcement layers are deformable in a controlled manner in response to an impact force applied to the body panel.

PRIOR ART REFERENCES

The prior art reference relied upon by the examiner in rejecting the claims on appeal are:

Vogt et al. (Vogt)	4,950,522	Aug. 21, 1990
Amano et al. (Amano)	5,165,627	Nov. 24, 1992
Spain et al. (Spain)	5,707,697	Jan. 13, 1998

REJECTION

Claims 1, 2, 32 and 33 stand rejected under 35 U.S.C. § 102(b) as anticipated by the disclosure of Amano. Claims 3, 4, 10, 11, 14 through 16, 20 through 24, and 34 through 37 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Spain, Amano and Vogt.

OPINION

We have carefully reviewed the claims, specification and prior art, including all of the arguments advanced by both the examiner and the appellants in support of their respective positions. As

consequence of this review, we have made the determinations which follow.

ANTICIPATION

Under Section 102(b), "anticipation" is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

With the above precedents in mind, we turn first to the examiner's Section 102(b) rejection of claims 1, 2, 32 and 33 as anticipated by the disclosure of Amano. See the Answer, page 3. As found by the examiner (the final Office action dated November 12, 2002, pages 2 and 3), Amano teaches an airplane fuselage panel having a fuselage wall inner lining plate which may be made of fiber reinforced plastics (polymer). See also the abstract. The fuselage wall inner lining plate has a large number of corrugations defining crests extending parallel in an axial direction or reinforcement glass fibers arrayed sequentially in an axial direction to provide an anisotropic property ("tensile rigidity in the circumferential direction is less than the axial direction"). See the abstract, column 1, lines 10-12, column 3, line 29 to column 4, line 2, column 5, line 40 to column 6, line 67, and

Figures 3-6, 9 and 10. The examiner has found (the Answer, page 3), and the appellants have not disputed (the Brief and the Reply Brief in their entirety), that:

[A]n airplane is, in fact, a vehicle. Also, a fuselage is part of the body of the airplane, and therefore a fuselage panel is, in fact, a vehicle body panel.

Thus, with respect to claims 1, 2, and 33, the question is whether the fuselage wall inner lining plate described in Amano is capable of being crumbled in "a predetermined manner" or "a generally linear direction". On this record, we answer this question in the affirmative.

As indicated *supra*, Amano clearly indicates that its fuselage wall inner lining plate has a greater tensile rigidity in the axial direction than the circumferential direction. Implicit in this teaching is that the fuselage wall inner lining plate is designed to crumble in a predetermined direction.

Even if the tensile rigidity difference does not indicate to one of ordinary skill in the art a direction in which the inner lining plate will crumble, our conclusion would not be changed. Since Amano's inner lining plate has a structure identical to that of the claimed panel, it is reasonable for the examiner to conclude that Amano's inner lining plate will inherently or necessarily crumble in the claimed manner, i.e., "a predetermined manner" as

required by claims 1 and 2 or "a generally linear direction" as required by claim 33, in response to an impact force. *See In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997); *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977).

The burden is shifted to the appellants to prove that the inner lining plate taught by Amano does not in fact possess the claimed functional characteristic. *Schreiber*, 128 F.3d at 1478, 44 USPQ2d at 1432; *In re Spada*, 911 F.2d 705, 708-09, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); *Best*, 562 F.2d at 1255, 195 USPQ at 433-34. The appellants, however, have not presented any objective evidence to show that the inner lining plate taught by Amano is not capable of being crumbled in the manner claimed in response to an impact force. *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972).

With respect to claim 32, we note that only a portion of the claimed sheet is required to be "generally planar". Amano's inner lining plates as illustrated by Figures 3, 6, 9 and 10 show at least one reinforced fiber line or at least one corrugation defining a crest located at the center of the plate, which portion is "generally planar". Thus, we concur with the examiner that

claim 32, as broadly interpreted, does exclude the inner lining plate taught by Amano.

In view of the foregoing, we affirm the examiner's decision rejecting claims 1, 2, 32 and 33 under Section 102(b) as anticipated by the disclosure of Amano.

OBVIOUSNESS

Under Section 103, the obviousness of an invention cannot be established by combining the teachings of the cited prior art references absent some teaching, suggestion or incentive supporting the combination. ***ACS Hospital Systems, Inc. v. Montefiore Hospital***, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This does not mean that the cited prior art references must specifically suggest making the combination. ***B.F. Goodrich Co. V. Aircraft Braking Systems Corp.***, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); ***In re Nilssen***, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Rather, the test for obviousness is what the combined teachings of the cited prior art references would have suggested to those of ordinary skill in the art. ***In re Young***, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); ***In re Keller***, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). This test requires us to take into account not only the specific teachings of the prior art references but also any inferences which one skilled in the art would reasonably be expected to draw there-

from. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

With the above precedents in mind, we turn to the examiner's Section 103 rejection of claims 3, 4, 10, 11, 14 through 16, 20 through 24, and 34 through 37 as unpatentable over the combined disclosures of Spain, Vogt and Amano. As found by the examiner (the final Office action dated November 12, 2002, pages 3 and 4), Spain teaches a molded plastic automobile body member comprising a substrate and a colored layer. Spain does not discuss the claimed impact absorbing safety features. See Spain in its entirety.

To remedy these deficiencies, the examiner relies on, *inter alia*, the disclosure of Vogt. See the final Office action dated November 12, 2002, page 4. Vogt recognizes the importance of constructing a plastic car body panel having built in weaknesses to form a crumple zone to absorb an impact force. See the abstract and column 1, lines 5-10 and 35-45. Vogt teaches such panel in the form of a sandwich construction member having

relatively rigid inner and outer skins bonded to the opposite sides of a soft core, wherein at selected surface portions of the connection of the skins to one another through the soft core is locally interrupted to provide regions of weakness and which crumpling can occur preferentially upon impact. See the abstract, column 1, lines 48-56 and Figure 2.

As is apparent from Figures 2 and 4, and column 2, lines 44-51, the soft core is locally interrupted to provide spaced reinforcement.

Compare also Vogt, column 2, lines 44-51 with, e.g., withdrawn claims 8, 17 and 18 which further limit independent claims 1 and 14.

Given the above teachings, we determine that one of ordinary skill in the art would have been led to attach the sandwich construction member taught by Vogt to a painted or paintless plastic surface layer of an automobile, motivated by a reasonable expectation of successfully improving an impact-absorbing safety feature of automobile body panels. *Compare In re Castner*, 518 F.2d 1234, 1238-39, 186 USPQ 213, 217 (CCPA 1975); *In re Lintner*, 458 F.2d 1013, 1015-16, 173 USPQ 560, 562-63 (CCPA 1972). As the types of colors employed on the surface layer of an automobile are known to be dependent on the desire of consumers, we determine that the selection of a natural color (the pigmented or unpigmented plastic surface) or a particular paint color for the surface layer of an automobile is well within the ambit of one of ordinary skill in the art. *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980).

It follows that the prior art references as a whole would have rendered the subject matter defined by claims 3, 10, 11, 14, 20, 21, and 22 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. 103(a). Accordingly, we affirm the examiner's

decision rejecting claims 3, 10, 11, 14, 20, 21 and 22 under 35 U.S.C. § 103(a).

However, claims 4, 15, 16, 23, 24, and 34 through 37 are on a different footing. Neither Spain nor Vogt teaches employing the claimed fiber reinforcement features to obtain an impact-absorbing safety feature for an automobile body panel. See both Spain and Vogt in their entirety. Although Amano teaches employing the claimed fiber reinforcement feature, such feature is used to form an airplane fuselage wall inner lining plate as indicated *supra*. Amano does not indicate that the reinforcement fiber features employed in constructing the airplane fuselage inner lining plate relates to improving an impact absorbing safety feature or any other functional features useful for an automobile body panel. See Amano in its entirety.

Thus, on this record, the examiner has not demonstrate that one of ordinary skill in the art would have been led to employ the reinforcement fiber features useful for constructing an airplane fuselage wall inner lining plate to improve an automobile body panel. Accordingly, we reverse the examiner's decision rejecting claims 4, 15, 16, 23, 24, and 34 through 37 under 35 U.S.C. § 103(a).

CONCLUSION

In summary:

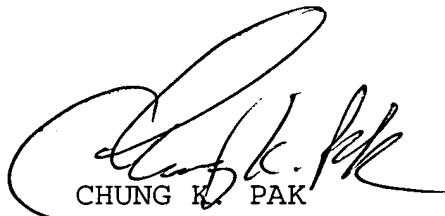
- 1) The examiner's decision rejecting claims 1, 2, 32 and 33 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Amano is affirmed;
- 2) The examiner's decision rejecting claims 3, 10, 11, 14, 20, 21 and 22 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Spain, Vogt and Amano is affirmed; and
- 3) The examiner's decision rejecting claims 4, 15, 16, 23, 24, and 34 through 37 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Spain, Vogt and Amano is reversed.

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TIME PERIOD

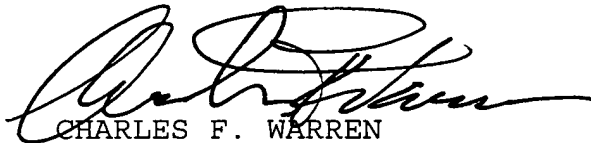
No time period for taking any subsequent action in connection with this appeal may be extended under under 35 U.S.C. § 1.136(a).

AFFIRMED-IN-PART



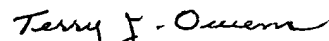
CHUNG K. PAK

Administrative Patent Judge



CHARLES F. WARREN

Administrative Patent Judge



TERRY J. OWENS

Administrative Patent Judge

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